

CONNECTION SETUP STRATEGIES IN OPTICAL TRANSPORT NETWORKS**Abstract of the Disclosure**

An optical transport network comprises a number of nodes, or routers, which are coupled together via optical fibers. During a connection setup between a source node and a destination node, a node of the optical transport network initiates a cross-connect with an adjacent node and completes the cross-connect with the adjacent node without waiting for completion of any downstream cross-connects. The success of the connection operation to the destination node is checked by the node on the reverse pass. This results in completely pipelining the various cross-connect operations at each node. As a result, the connection setup time is of the order of a round-trip delay plus a single cross-connect time (independent of the number of nodes in the connection path).